#### DOCUMENT RESUME

ED 334 934 HE 024 770

AUTHOR

Lenning, Oscar T.

TITLE

The Policy Implications of College and Career

The control of the co

Assessment Findings.

PUB DATE

17 May 91

NOTE

17p.; Paper presented at the Conference on "Assessment of College Teaching and Learning: Implications for Research, Policy and Practice"

(Chicago, IL, May 17, 1991).

PUB TYPE

Viewpoints (Opinion/Position Papers, Essays, etc.)

(120) -- Speeches/Conference Papers (150)

EDRS PRICE

MF01/PC01 Plus Postage.

DESCRIPTORS

\*Career Choice; \*College Outcomes Assessment; Community Colleges; Educational Benefits; \*Educational Policy; Educational Trends;

Extracurricular Activities; \*Futures (of Society); Higher Education; International Education; Liberal Arts; Minority Groups; \*Policy Formation; \*School

Policy; Trend Analysis; Womens Education

#### ABSTRACT

This paper considers social policy and institutional practice policy implications of findings reported by Ernest Pascarella and Patrick Terenzini concerning student career choice and economic benefits of college. Sixteen social policy implications are identified. These include: beating the Japanese; overcoming the "pipeline mentality"; revising society's view of the liberal arts; lessening wasteful college student attrition; improving the screening function; maximizing work force participation and stability; optimizing job search and mobility; raising the standard of living; capitalizing on the Pygmalion effect; instituting manpower planning that will minimize over-education; righting the "community college disadvantage"; advancing minorities and the poor; increasing the advancement of women in leadership; incorporating a global culture mentality; bringing about a renaissance of the arts; and introducing a new focus on values and the individual. Implications for institutional practice policy address the following areas: maturity of career thinking and planning; work experience during college; interaction with faculty programs; career choice; grade refinement; company visitation programs; and extracurricular program participation. (DB)

\* Reproductions supplied by EDRS are the best that can be made

from the original document.

#### U.S. DEPARTMENT OF EDUCATION Citive of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Uthis document has been reproduced as received from the person or organization originating if

reproduction quality Points of view or opinions stated in this docu-ment, do inclinecessarily represent official OE Ri position or policy.

## THE POLICY IMPLICATIONS Minor changes have been made to improve OF COLLEGE AND CAREER ASSESSMENT FINDINGS Oscar T. Lenning

a manager through a bright

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY OSCAR T. LENNING

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "

When I was invited to discuss policy implications of the findings reported by Pascarella and Terenzini<sup>b</sup> in their chapters on "Career Choice and Development" and "Economic Benefits of College," this sounded like a manageable task, and I accepted. I read through the chapter on career findings twice and underlined important generalizable findings; there were 102 of them. In just those two chapters, there is clearly much of importance to policy makers at the federal, state and institutional levels.

I am going to be talking about policy in more of a global sense than if I were going to review the eight chapters on change in student characteristics during college. Those eight chapters have much more direct implications for classroom teaching practice, academic and student affairs policy formulation, and campus environment decision making. Important generalizations to those micro-levels will be made here also, however.

I should warn you about a bias. I see research findings as not providing solutions, but rather as stimulating fruitful discussion out of which solutions can evolve. Therefore, I do not have to be as careful and objective as our two researcher authors. I have felt free to extrapolate from those findings far beyond what a researcher would do in order to stimulate you, get you to thinking creatively, and to cause fruitful discussion to occur. I took off my "researcher cap" and put on my "policy developer and implementer cap" for this presentation.



JE124

a Presentation made at the conference on "Assessment of College Teaching and Learning: Implications for Research, Policy and Practice," sponsored by the University of Illinois at Chicago and the National Research and Development Center on Postsecondary Learning, Teaching and Assessment, Chicago, May 17, 1991.

D Pascarella, Ernest T., & Terenzini, Patrick T. How College Affects Students. San Francisco. Jossey-Bass Pulishers, 1991.

The first policy implication I would like to share is that, at the institutional level, policy makers need to become more succinct and concrete in their student goal formulations. Many of the college mission and goal statements I have seen over the years remind me of the "Dennis the Menace" cartoon a friend shared with me recently. As they are building a block wall, presumably for a college, Dennis tells his younger friend, "College? Well, that's where ya have to go when you're too old for all the other schools." The findings of Pascarella and Terenzini can prove very helpful in revising and tightening up mission and goal statements for students.

I am going to propose policy implications of two general kinds. First I will deal with social policy implications of the findings related to careers; then, as time allows, I will discuss some institutional practice policy implications of those findings.

## Social Policy Implications

Decision-makers at any level too often think only of the present when formulating educational policies. In this presentation of social policy implications, I will attempt to focus on the educational needs of the future. To help me with this, I will make use of Naisbitt and Aburdene's new book <u>Megatrends 2000.</u> I will discuss 16 social policy implications of the findings that Pascarella and Terenzini report related to careers.

#### 1. Beating the Japanese

During the last few years the President and the state governors have spread the alarm about the U.S. falling economically behind the Japanese, and touted "world class education" as a means to "beat the Japanese."

Naisbitt and Aburdene point to the rise of the Pacific Rim (in which the U.S. is a major economic player) and the booming information age, free trade, electronics communication—driven global economy and society



C Naisbitt, John, & Aburdene, Patricia. <u>Megatrends 2000: Ten New Directions for the 1990's</u>. New York: William Morrow, 1990.

of the 1990s. Much of the effort proposed by the president and state governors is aimed at elementary and secondary education, which is fitting because the inputs to higher education are important. Pascarella and Terenzini's findings that college has little or no impact on job productivity and efficiency, and their discovery that a substantial part of more-rapid occupational advancement may be attributable to initial job position, suggests higher education must also become a major participant in this improvement effort. That potential exists to bring about such improvement is suggested by findings that: grades (which are not that reliable a measure) had a small net impact on rate of job promotion, those with college degrees have higher occupational status throughout life, and the percentage of Americans who felt college was important increased from 36% in 1978 to 58% in 1982. Perhaps, as we provide incentives for faculty to decrease use of the lecture method and involve students more, tie into some of the motivational and aspirational student outcome processes reported in Pascarella and Terenzini's earlier chapters, incorporate new technologies effectively to assist learning, and work more closely with employers related to the problem, etc., the problem of no college impact on job productivity can be turned around. For such a turn around to really occur, it must become an institution-wide effort and receive stimulation and support from the state and federal governments.

the first of the control of the cont

1000

#### 2. Overcoming the "Pipeline Mentality"

Prestigious institutions gloat because their graduates excel in terms of admittance to and performance in medical school or graduate school, and have high job status, income, level of job responsibility, abilities, ambition, etc. However, Pascarella and Terezini report that pre-college characteristics apparently account for the positive differences in the graduates of which those prestigious institutions are so proud. For example, while they tend to recruit ambitious students, these institutions appear not to increase ambition farther. Similarly, the presumed impact of



those institutions on choice of major may often be caused by the availability of majors. It was also found that students at such colleges may use the college experience to implement a previous choice rather than to choose a career.

and the control of the second of the control of the

As with a pipeline, if you have better quality input you would expect to have similarly better quality output, which seems to be the case. As Pascarella and Terenzini state, "simply being admitted to a prestigious college affords the individual a considerable status attainment advantage quite apart from the quality of the educational experiences provided or the actual change in the individual (p. 443)." Measures need to be developed and implemented which can more effectively assess quality of the educational experience and "value added." Astin's "talent development" philosophy, which focuses on student change and how to optimize that change, needs to become the dominant philosophy of higher education institutions and systems. Currently the predominant philosophy of educational quality emphasizes institutional resources and student imputs. We need to focus on improving all types of colleges in this area since, according to Pascarella and Terenzini, earning a bachelor's degree counts far more in terms of job status than where one earns it.

## 3. Revising Society's View of the Liberal Arts

At most companies, the line professionals who make the choice of which college graduates to hire look primarily at the academic major and entry level professional skills. It is difficult for them to understand that liberal arts values and skills may have fully as much relationship with the position requirements as does a major that sounds like the job title, and probably more relationship to successful performance over the long term as the person moves up the promotion ladder. Breadth, general intellectual skills, noncognitive skills, values, ability to learn new skills, and ability to adapt (liberal arts outcomes) have been found more and more to be related to long-term career success. The early income disadvantage of being in the liberal arts disappears later in one's career.



Such findings need to be publicized to hiring companies. Also, these findings need to be publicized to faculty in career majors so they will be encouraged to add liberal arts emphases to their courses and program.

The Control of the second of the control of the con

It should be noted, however, the reported promotion trend varies from company to company, even within the same industry. There are apparently varying educational cultures and value systems (in terms of which types of individuals are promoted) within different companies.

Day-to-day micro job activities, which often tend to utilize liberal arts skills, need to be emphasized as much as macro job titles.

Informational programs to help liberal arts students see a vocational role for themselves need to be developed and implemented.

## 4. <u>Lessening Wasteful College Student Attrition</u>.

Earning a bachelor's degree is far more important (in terms of incremental effect on indices such as job status, advancement and income) than either a high school diploma or a graduate degree. Pascarella and Terenzini report that each additional year of college has an incremental, positive impact on occupational status irrespective of whether a bachelor's degree is completed. However, the occupational status return each year is reduced if the bachelor's degree is not completed.

One point needs to be made clear here; not all student attrition is bad. Some of what we refer to as attrition is not in the category of what the Europeans call "wastage." Many students enter college for a purpose that does not include obtaining a degree. If a student enters a technical program to obtain a technical job, and a company where he/she is interning offers her/him the desired job half-way through, is that wastage? If a student plans to transfer after a year in order to enroll in a program at another institution, is that wastage? If a person goes to college for mate selection, finds the desired person half-way through her/his program and drops out for marriage, is that wastage? The dichotomous notion that retention equates with success and attrition with failure needs to be replaced by statistics providing an objective understanding of what



enrollment, graduation, and other statistics really indicate, along with a commitment to help students reach the best decision about leaving or remaining in college.

Some students need to leave college or transfer for their own well being. We should not try to impede such people from leaving because this might adversely affect their long-term success. William Faulkner dropped out of the University of Mississippi at the end of his freshman year, John Steinbeck attended Stanford University only briefly, Eugene O'Neill dropped out of Yale before graduation, and Ernest Hemingway never attended college. Yet each won a Nobel Prize for literature.

I am assuming the attrition effects Pascarella and Terenzini identified were related to "wastage." Retention-related policies and programs developed at the state and institutional levels—e.g., a GPA requirement to continue receiving state financial aid—should be aimed at decreasing wastage and not at dropout/transfer per se. Still, much can be done to improve student retention, including the use of "intrusive advising," which has been found to radically improve student retention at several institutions.

# 5. Improving the Screening Function

There is considerable evidence employers use the bachelor's degree as an inexpensive screening device to certify that prospective employees will be efficient on-the-job learners with competence, resourcefulness, persistence, drive, and ability to meet organizational demands. This affects earned income as well. Institutional and system policy needs to recognize this screening function being performed on behalf of the employment community, and we need to explore how we can facilitate improved effectiveness of this function.

# 6. Maximizing Work Force Participation and Stability

Those who attend college are more likely to participate in the work force and less likely to become unemployed. Colleges need to develop formal career development and job search programs leading to maximum participation



in the work force and job stability. The state should make consultation experts and other resources in this area available.

## 7. Optimizing Job Search and Mobility

College graduates are more able to assume new positions when job obsolescence occurs. They have better job search skills and personal network contacts (including college classmates), and more regional mobility to take advantage of employment opportunities. Those advantages can be optimized with programs and support like that called for in the previous item on work force participation and stability.

# 8. Raising the Standard of Living

Formal education has a strong positive association with earnings (enhanced by increased occupational status), with attainment of the bachelor's degree the single most important factor. One study found that obtaining the bachelor's degree had almost seven times the impact on earnings as three years of college; another study found two-to-three times the amount. The private annual rate of return is 21%; 9 or 11% when differences in background and ability are taken into account. The return on investment is higher for minorities than whites (of both sexes) and much higher for black women than black men; this in spite of the fact that blacks and women tend to select "lower-income" majors. Black women also derive the greatest increased return from the bachelor's degree over having three years of college.

Federal, state, and institutional need-based financial aid programs provide access to college and encourage degree completion. Such programs are crucial for helping college education to increase the standard of living in this country, and should not be decreased during economic recession. Furthermore, the rapid trend toward no-need scholarships as competition for students has increased, will prove detrimental to social policy, raises serious questions about how we finance access to higher education, and suggests a serious review of federal higher education financial aid policies may be necessary.



All of this relates to another public policy issue much in the news these days, health care costs. Costs of employee health benefit plans keep escalating rapidly as do the costs of government-funded health care programs for the poor. There are pressures to scale back these programs because of the high cost, or to devise new programs. Increasing educational effectiveness for the poor and thus helping college education to improve its impact on employee and company earnings even more positively could be a good investment related to the area of health care.

One final point should be raised. Pascarella and Terenzini found that attending a prestige college has a cumulative advantage related to income earnings; the effect is more pronouncal on income for men from high socioeconomic backgrounds. This, coupled with the rise of a high technology and global society, suggests a danger, if we are not careful, that our higher education system could contribute to a primarily two-class system of haves and have nots in America, separated by technology use. Such a dichotomy has always been the bane of poor, so-called Third World countries.

#### 9. Capitalizing on the Pygmalion Effect

During the 1960s Rosenthal and his associates concluded that changing the expectations of teachers could appreciably increase student learning. Although there were methodological problems with their study, subsequent research and experience has indicated their "pygmalion effect" is a bonifide concept. Pascarella and Terenzini's findings also suggest such an effect, and especially among supervisors and employers. Therefore, anything public and institutional policy and communications programs can do to raise expectations—among students, parents, employers, and the general public—about the value of college (including publicity about the findings of Pascarella and Terenzini) can reinforce those effects. Perhaps if we begin to expect greater employment productivity from college graduates, put greater pressure on them to produce, and convince them of their ability to achieve it, it will come to pass.



# 10. Instituting Manpower Planning that Will Minimize Over-education

Pascarella and Terenzini report that job dissatisfaction is primarily related to gross over-education for the post-college position obtained (amount of education to the job demands may be a crucial variable in most job dissatisfaction). The person's perception that individual skills (including those acquired outside of college) are being fully used on the job is important for job satisfaction. Earning a college degree relates positively to two of the six aspects of job satisfaction, financial rewards and challenge (the extent to which the person feels stimulated and challenged by the job), according to Pascarella and Terenzini. This fits with Hershberg's results during the 1960s that divided ten factors related to job satisfaction into hygiene factors (less important once a certain base level is achieved) and recognition factors (the crucial variables for productivity according to Hershberg).

Personnel planning in this country is relatively non-existent, although we are very good at keeping track of the trends. Policies which allow such planning to function effectively, and that provide more effective programs and incentives to guide students in choosing careers are much needed.

# 11. Righting the "Community College Disadvantage"

Pascarella and Terenzini point to well-done national studies of transfer students at two-year community colleges that have controlled for relevant student input characteristics, including socioeconomic status, gender, race, initial degree aspirations, ability, high school achievement, college grades, and place of residence. They can only conclude such colleges have harmful consequences with respect to obtaining the bachelor's degree, and thus for occupational status and income. Questions could be raised about whether in-school job and family-responsibility status was controlled for, about the validity of traditional retention statistics for these colleges (and what they really mean), as well as how many of those students who drop out before reaching the four-year institution would have even entered college had the community college not been available. Paying



heed to this finding and allowing it to stimulate these colleges to corrective action, however, could potentially pay big dividends for them and the state and local governments which provide most financing for this growing sector of education.

STATE OF THE STATE

One of Pascarella and Terenzini's findings should encourage community college officials—their finding of no apparent disadvantage related to attending a two-year community college for students who successfully transfer to a four-year institution. As Pascarella and Terenzini suggest, the transfer process needs to be improved. An abundance of available research and experience indicates much can be done to improve student retention, so there is potential for these colleges to overcome the "Community College Diservantage." Included should be developing proxy residential experiences for commuters. The effectiveness of the SOTA (Students Older Than Average) Group concept at the University of Texas demonstrates this can be done. Residence versus non-residence is not the key factor, but rather the kinds of experience the college residence can promote.

One group of two-year colleges was especially done a disservice by Pascarella and Terenzini. Though small in number, the two-year independent residential liberal arts colleges were "painted" by the authors with the same broad brush used for the community colleges. Such colleges, which specialize in beginnings and transfer to four-year colleges, serve an important function and contribute significantly to higher education diversity in this country. For example, at my college (Waldorf College), over ninety percent of graduates transfer immediately to a four-year institution. Furthermore, recent research has indicated our graduates generally do better at the four-year institution academically than if they had enrolled initially at the four-year institution, and our student retention during the first two years compares favorably to good four-year institutions. Such lack of recognition of the importance of this college group is forcing many of these two-year colleges to change from distinctive



mission colleges to typical, average four-year liberal arts colleges. The demise of this college type will seriously erode the diversity of our higher education system in this country, which has always been seen by many as among the most important strengths of our higher education system. This college type needs to be recognized, and a national study should be conducted on how the demise of this college type can be prevented.

## 12. Advancing Minorities and the Poor

Important points have already been made about this category of policy implications, but more needs to be said. Research has shown that, in terms of reducing employment and increasing job status and income, postsecondary education (and especially the bachelor's degree) is more important for minorities than for whites, and it is more important for black females than for black males. Conversely, the employment penalties for not attending and persisting in college are greater for blacks (and especially black women) than for whites. The research also points out the crucial positive role the black colleges continue to play in our society relative to employment factors. For example, Pascarella and Terenzini found evidence black colleges more often and more effectively encourage black women to enroll in majors typically linked to high-status careers.

This research suggests the special provisions for black colleges in the Federal Strengthening Institutions Program, the state and institutional financial aid and recruitment programs focused on minorities, and governmental policy and action related to affirmative action and equal opportunity, should be continued and strengthened. Information campaigns about the importance of the college degree to minorities, and the success of the historically-black colleges, need to be mounted and supported by governmental and/or private funds.

Recently, we have heard that the college-going rate of black males has begun to decline. These are largely first-generation college students and many apparently wonder if college is worth the time and effort, especially when some college graduates cannot find jobs and many of those entering



service careers do not earn high incomes. We need to begin college encouragement programs early, in elementary school. More effective career counseling programs focusing on the needs of, and opportunities for, minorities and the poor are called for.

## 13. Increasing the Advancement of Women in Leadership

Many findings pertaining to the selection of sex-atypical majors and careers by women have been identified. Women have a greater return from the bachelor's degree than do men; and a college-educated mother probably exerts a positive influence on her daughter's selection of a sex-atypical major/occupation, as does attendance at a women's college, women faculty as mentors, strong role models oriented in that direction at coeducational institutions, attendance at a selective college, and, to a smaller degree, leadership roles in extracurricular activities. When these findings are related to the general finding that women (including college-educated women) are much over-represented in low-paying, low-status service fields and much underepresented in terms of occupational status and attainment, the policy implications become clear. What is needed for women is analogous to what is needed for minorities and the poor; leadership training is not the answer. In addition, the women's colleges should be kept open and vital.

#### 14. Incorporating a Global Culture Mentality

Naisbitt and Aburdene contend that over the next few decades the world will become in effect a "global village." Increasingly, employees will be working with people from other cultures in their work, dealing with customers from other cultures, and experiencing a multi-cultured work environment. Such a trend has major policy implications for employers and employees, and presumably college is preparing students for such change. Pascarella and Terenzini's research findings related to authoritarianism, dogmatism, ethnocentrism, social and political attitudes and values, religious attitudes and values, etc. relate to such necessary change. However, this area of concern—colleges taking the lead in developing a "global culture" mentality—was largely not addressed by the research



literature. This absence of research in and of itself suggests policy implications. Having the Peace Corps, foreign study programs, foreign student programs, other-culture courses, and foreign language courses is not sufficient. Colleges must begin to internationalize their curricula, including orientation courses, western history/civilization and literature courses, mathematics and science courses, etc.

#### 15. Bringing About a Renaissance of the Arts

Research reviewed by Pascarella and Terenzini suggests that college education does contribute to exposure, appreciations, values, and knowledge related to the arts. Increasingly, according to Naisbitt and Aburdene, the everyday world will intersect with the fine arts environment. One cannot divorce the occupational world from the avocational world. Much more can and should be done in preparing students for this cultural change.

Corporations, media and even the government give more recognition to the Olympics and national athletic championships than to the arts. The balance needs to be righted. Included should be the establishment of a national service program in the arts, as an alternative to national service in the military, Peace Corps, and Vista.

#### 16. Introducing a New Focus on Values and the Individual

As we look back to Watergate, the HUD scandal, the savings and loan debacle, the junk bond fiasco, law suits about genetic engineering, and other such happenings, the importance of values in the work place is increasingly being recognized. Naisbitt and Aburdene suggest a focus on values and the individual will become preeminent during the 1990s. Too often college courses and programs have turned away from teaching about moral development, values and religion because of concerns about First Amendment rights. But, we are not talking about indoctrination. Teaching about religion is legal at a public institution, and I believe desirable and necessary if students are to be equipped to think through questions related to their values and philosophy of life.



Pascarella and Terenzini report that college students exhibit changes in attitudes and values that appear not to be simple reflections of trends in the larger society. Colleges need to lead the way in helping students develop consistent and healthy philosophies of life that are world- and cultures-oriented, and government and college policies need to be openly supportive of such an emphasis.

# Institutional Practice Policy Implications

The findings of Pascarella and Temenzini also suggest a number of institutional practice policies, some of which have already been mentioned. Let me just mention a few that are directly suggested by their findings.

## 1. Maturity of Career Thinking and Planning

Athletes and some other categories of students were found to be lacking in maturity of career thinking and planning. The authors point to a body of evidence that career development courses can assist in overcoming this problem, and suggest some of the desirable characteristics for such courses. For example, students need to know the potentially serious consequences of transferring to another four-year college. Initial college choice is also an important part of this, as found in a FTPSE Better Information for Student Choice of College project I participated in during the late seventies. Much more can be done to help students make the college choice that is "best" for them.

## 2. Work Experience During College

College work study and internship programs are desirable, if they do not involve too many hours of work each week and relate to the students' major. (Pascarella and Terenzini report findings that over 28 hours of employment each week tend to adversely affect student performance.) Work experience has been found to have positive impacts on career choice and success. We also need to get students out there in the professional field on a tryout/observational basis earlier in their college careers.



## 3. Interaction with Faculty Programs

Informal interaction between faculty and students outside the classroom, and especially the quality of that interaction, has been shown to have positive effects on student retention and academic achievement, and on career choice. Organized support programs and incentives can help improve both the frequency and quality of such interactions. Many things can be done to motivate faculty participation in this effort, and they do not all cost money.

## 4. Career Choice

The degree of uncertainty about one's academic major tends to be related to withdrawal from college. Support programs, with a variety of resource materials available, are needed to help students clarify and strengthen their major/career decisions; so are having faculty and practitioners share what it means to be a mathematician, a psychologist, a social worker, etc.

#### 5. Grade Refinement

A small, positive relationship between college grades and occupational satisfaction has consistently been found. When potential confounding influences have been controlled, however, those correlations have typically reduced to zero. Attempts need to be made on each campus to improve the consistency, validity, and reliability of the grades given within each program and across the institution. Willingness to meet institutional requirements is key.

### 6. Company Visitation Programs

Attending a college with high geographical and social proximity to the company has been found to lead to a higher entry job level and better subsequent promotion. Other things being equal, an individual acquires an advantage in terms of career mobility by being from a college familiar to the company. A college visitation program, as well as internship programs, can contribute to such familiarity.



## 7. Extracurricular Program Participation

Although the net effects are not large, participation in various types of extracurricular activities is important for career success, including leadership in such activities. Students must not overdo such participation in terms of time and energy, however, or the effect of participation could become negative. Good advice, encouragement and support related to extracurricular participation is a key ingredient to success.

### In Closing

There are a number of important policy implications of Pascarella's and Terenzini's findings related to careers. I have only briefly touched on them in this presentation and have not even referred to some of the possible implications. These implications will become even more obvious, and show more clearly what can be done to help at the institutional level, if they are effectively integrated with the broad array of findings covered in a comprehensive manner by the other chapters in Pascarella and Terenzini's book, which pertain to student personal changes brought about through experiences during college. Those who influence and shape college and university policies, and higher education policies at the state and federal levels, have much of importance to learn from the findings of Pascarella and Terenzini

